1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

the notch at the top of the stick and tied around the neck of the stick with another string. Under certain circumstances turkey down replaced eagle down, but the feathers of no other birds were used.

At the harvest ceremony all prayer sticks were painted blue (the Zuni color for men). After the salt gathering at Santa Rosa they were painted both blue and yellow. Occasionally a stick two feet long was "planted" in behalf of a group. This was done at the prayer-stick festival at Quitovaca, where the stick was painted with a red spiral, and by the salt gatherers from Akchin, who tied a red cloth around it.

Though there was a word for bird down, there was no word for prayer stick, which was simply called "sacred object," as were the fetishes.

Deer tails were as desirable as eagle down for accompanying a fetish. The scalp basket unpacked by the writer contained four of them. They should be, if possible, from the black-tailed deer, the white-tailed variety having "no power." Tails from a deer ritually killed were important ceremonial objects, used at the cleansing ceremony and in curing "deer sickness." However, the tail of any deer formed a valuable offering, and hunters did a thriving trade in them.

Tobacco was offered in the form of cane cigarettes; their ceremonial name was "reed joint." Each consisted of a section of *Phragmites communis*, three or four inches long and filled with *Nicotiana attenuata*, the variety grown by the Papago. If no reeds were obtainable, corn husks were used as cigarette wrappers. Cigarettes were always smoked before being deposited, the votary taking four puffs, in the four directions, then stating his wish.

Beads, usually of turquoise, were a less common offering, but highly valued. The request for offerings made in behalf of one village fetish ran: "Bring your valuable things, eagle down, deer tails, and beads."

Certain occasions demanded the use of corn meal, which must be made of "flatheaded corn" (two ears growing together so that each had one flat side).[1] Such meal was most lavishly used at the prayer-stick festival, and it is significant that Navitcu, the cere-

[1] Cf. Mason, 1918, p. 88.

1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

monial clown of this occasion, is said to have taught the Papago 782
to summon him at other times by placing corn meal in his hand. 243
They invite all workers for the festival in this way, and, moreover, special officials make a corn meal "road" for the dancers in the Pueblo manner. Officials also sprinkle corn meal on all who enter the ceremonial enclosure, and at least once on all the inhabitants of every participating village. Corn meal is also used on other occasions. Holding a pinch of it in the hand is the method for summoning the shaman and the curing singer, and it is strewn on the ocean by the salt pilgrims.

PURIFICATION

All who took part in a ceremony, or at least the important offi- 783
ciants, observed continence, fasted, and finally took a cold bath to remove the supernatural influence. Cold water was the accepted Papago method of purification. It was obtained by allowing water to stand in the wind in a porous jar, thus being cooled by evaporation. A burdensome duty of the women folk belonging to any ceremonialist was the fetching of fresh water and making a new porous jar.

Fasting was raised by the Papago to extreme importance. During 783
food ceremonies the officiants abstained from meat, grease, and salt 785
in the Pueblo manner, but the power ceremonies demanded self-denial amounting almost to starvation. One may conjecture that these Spartan measures required as much endurance as did the running demanded of visionaries. They served the practical purpose of fitting a youth for the rigorous life of a desert hunter and warrior. Women also fasted and ran, though to a lesser degree. It would seem that the Desert People, in whose lives food and running were recurrent necessities, had elevated these prosaic needs to ceremonial virtues.

Blowing tobacco smoke upon someone was a milder form of 783
purification. It was used by the shaman to cure illness and also by 276
those who purified a man who had been in contact with supernatural power. In the old rituals blowing tobacco smoke is a form of prayer which placed a man in contact with the supernatural.

1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

After four songs the shaman took up one sample of each fruit in succession, blew upon it, held it up, and asked help of the rain-houses of east, north, west, and south. As the singing proceeded, he looked about, as he would look for a war party, to see if danger threatened the crop from any direction. If he foresaw the coming of a pest, blight, or sorcery, the company sang the songs to avert evil, described later.

Next day the effigies were taken to fields and hills and left, with the invocation: "I place you here. Do you grow well. Then our children and our relatives coming from elsewhere may eat." Sometimes the shaman went to each individual cornfield, at the request of its owner. He might plant an effigy of corn or merely an ironwood stake, making a similar invocation.(1)

Tobacco songs were not sung in public. Tobacco must be planted far from the village, for if any one other than the planter looked on it while it was sprouting, it would sink back into the ground. If a menstruating woman should pass near it at any time, it would wither. Therefore it was planted only by certain men who knew the ritual. Papago mythology has flowered into several tobacco stories, of which one is a variant of that told about squash.

Corn and tobacco were once men who held an archery contest. They quarreled over the result and were expelled from the village as undesirable neighbors. As they went they halted continually and looked back to see if a peace messenger were following. But no one came. So they found a plot of land and planted corn and tobacco, which they took from their hearts. After some years, people missed them. They sent a messenger, who, after much wandering, found the corn by holding up a tuft of eagle down and feeling how the wind blew on it. The wind smelled of corn. But corn and tobacco were angry and would not come back. Corn gave the messenger a few small grains from the end of the ear, saying "This is all you may have," and tobacco gave faded leaves from the bottom of the stalk. Nevertheless, each gave songs to aid in the use of his gift.

The songs are said to be those of the regular scraping-stick group. Another story has its place in the origin myth. It concerns the period during I'itoi's early guardianship of the people.

After Elder Brother had killed cannibal woman, the people feasted on her flesh. Two boys and their grandmother got none. The grand-

1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

mother sent them to pick up any drops of blood which might be left, and they found a few, which ultimately turned into bird eggs and hatched out two macaws. The people were angry at the boys, so the grandmother told them to flee, leaving her behind. They were to return in four days, and whatever they found in her place would be her gift to them. They returned and found a tobacco plant. For a long time they did not know what to do with it, but finally Elder Brother visited them, told them to smoke it, and instituted the passing of the ceremonial cigarette.

Many songs given by the old woman to her grandsons accompanied the growth of tobacco. But the Papago at present buy Mexican tobacco, and only one planting song was remembered.

TOBACCO PLANTING SONG

39. Am I not the tobacco shaman?
Here I come forth and grow tall.
Am not I the tobacco shaman?
The blue humming bird finds my flowers.
Above them softly he is humming.
Hiro a'dro.(2)

The communal meeting with fruit effigies is no longer held. But Santa Rosa and its companion villages continue their ceremonies at the shrine, and many individuals use planting songs and invocations.[3]

[3] Public ceremonies for growth are held at the desert shrine which serves Archie, Alchin, Santa Rosa, and Anegam. Other ceremonies are held at Kaka. There may be more unknown to the writer.

1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

circle, as they did on the warpath, and each in turn sang the songs he knew. Supposedly, these were the ancient cycle from the origin myth, but to them had been added others dreamed by those who had "met" the mountain lion or other patron of the hunt. Each man knew a few songs, which he taught to his companions; meanwhile the shaman went into the darkness and looked about "to see what wanted to be killed."

Then the men lay back to sleep, and if one of them were fortunate, the deer would appear to him in the guise of a beautiful woman, and would make a tryst for the following day. Hunters said they knew nothing about the use of jimson weed (*Datura metelloides*) as a help toward such visions, although the song 18 suggests it. The plant grows wild in Papago country and was in regular ceremonial use by the southern California Shoshoneans. Still, say the Papago, "it's a cheap way to get visions. The animals won't really come unless you starve." Inquiry produced no instances of the use of datura at the present day.[4]

Below are quoted three cycles of deer songs from three separate informants and a few odd songs, both old and new. There must be hundreds of such songs in the Papago area. They describe a successful hunt, with all its incidents, humorous, realistic, or fanciful, in order that the same things may occur again. Some songs, with imaginative sympathy, are placed in the deer's own mouth. They have no standard refrain. Informants said that they should always be in pairs, and where there is only one it is probable that one of the pair has been lost. This pairing, says Herzog,[5] is a musical characteristic of the western Pueblos, but he considers the Pima hunting songs, which resemble those of the Papago, to be in a more primitive musical style than the Pueblo-like songs for growth.[6]

SERIES BY INFORMANT 19

1. At the west there is a rumbling;
   The deer tail
   Rumbling.

[4] In the songs datura is paired with another magic-working plant, *tcĭnaosi*, so far unidentified. For lack of an English name, this plant has been called lizard weed, since it is said to "meet" dreamers in the form of a lizard. See Underhill, 1937, p. 184.

[5] Herzog, pp. 899, 907.

[6] For Pima deer songs see Russell, pp. 300, 317. The former very similar to No. 16, p. 92, below.

1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

ways run. They had two meals a day, noon and evening, and these were special occasions for the exhibition of fortitude. They sat in a circle, each holding his basket, but not touching the corn meal he carried, while the leader stood in the center and spoke:

[539] Was not this our purpose—that we should indeed make this journey on behalf of all? Thus we may attain much: great industry; great endurance of hunger; great energy. Something each man desires: to be a great runner, a shaman, a great singer, a great hunter. After having seen many things, look you, it is thus [as I have described] that each man will feel, look you, as he returns home [that is, he will have attained his heart's desire].(6)

This he said that "the men might realize the seriousness of the occasion." If they took it lightly, there would be an accident: a horse might escape or die, or a man might be injured.

After the leader had spoken, he went to the first neophyte. Taking from the man's pouch a little corn meal, he placed it in the basket held ready and added water from the man's gourd, the man himself not touching anything. The leader stirred the mixture and handed it to its owner to drink, but the latter, if he was brave, would let the corn meal settle and drink the thin solution on top, [676] throwing the rest away. It was not etiquette for a man to turn his back to the circle; "he might eat too much." "Ripe men" were not subject to these restrictions, but ate as they pleased. They might [274] also smoke, a privilege forbidden the neophytes. They puffed toward the sun, with a long "A-a-ah!" and the usual invocation: "You stand there [pointing]. Give me blessing. Give me life."

Each stage of the journey had its appointed ceremonial procedure, varying from the planting of prayer sticks with a very brief invocation, to the presentation of long ritual speeches. Komarik and Anegam left a prayer stick at each water hole, the Anegam invocation being:

2. Lo, it is my own offering, which already I have carefully made and finished. I have come bringing it, and thus I do: I will offer it. See it and do for me increasingly [what I ask]. Grant powers to me: great speed in running; great industry; great skill in hunting. Grant powers to me: great lightness in running; great industry. I will take them;

1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

announce their arrival, as after a war party. The small boys came out to meet them with bull roarers,[11] which imitate the rain coming from the ocean. The old women came out in a group, begging: "Give me salt," and each man threw them gifts.

Each owned the salt which he had brought, except for two handfuls, which he must contribute to the common pile to be used for that evening's ceremonies. The rest he took to his house, where his family had spread a mat in the sun to receive it. Each member of the family took a handful, from which he breathed in to receive its power, and then the salt was dried; finally it was used or traded.

The family of each neophyte had prepared a shelter where he could pass the days of his purification, and his wife or mother made the new clay dishes which he was to use. An old man had been selected to act as his guardian. This man met him and conducted him immediately to the shelter, where he spent the day in sleep. That night a public purification was held, for in this instance the sixteen days of retreat followed the purification ceremony instead of preceding it. Since the salt pilgrimage usually took place in summer, the ceremony was held out-of-doors. A fire was built to the east of the council house and in the intervening space was placed a pile of salt, to which each pilgrim contributed two handfuls. If the men brought tokens, such as seaweed and shells, these were ranged beside the fire and, in some villages, prayer sticks were placed with them.

At the north of the fire sat the older men who had made the pilgrimage more than four times and who needed no purification but were competent to purify others. They were the singers of the evening and were furnished with scraping sticks and basket drums. Opposite them, at the south, sat the returned neophytes while the spectators sat at the east and the shaman at the west, ouside the door of the ceremonial house.

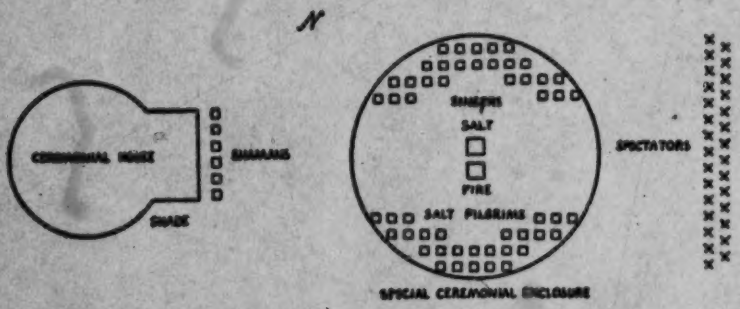
POSITIONS AT SALT PURIFICATION

The keeper of the smoke had charge of the ceremonies. He first passed a ceremonial cigarette around the circle to the right, each

11 Cf. Zuni, Stevenson, 1901–2, p. 354.

1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

man taking four puffs, then passing it to his neighbor, who received it and called the giver by the proper kinship term. When the cigarette had passed around the whole circle, all bowed their heads.



and a purification speech was made. No one was found who knew the Santa Rosa speech. The one recited is a variation of the material used in the previous speech, The Marking.

FOR SALT PURIFICATION
(Santa Rosa)

11. The remains of a cigarette did I place upright [in the fire, to light it].
I put it to my lips,
I smoked.

To the rain house standing in the west I came.
All kinds of mist were bound up there,
And I could not (unbind them).
It was my cigarette smoke.
Circling around it, it entered and unbound them.
I tried to see him, my guardian,
But squarely turned away from me he sat.
It was my cigarette smoke.
Circling around, it turned him toward me.

Thus I spoke, to him, my guardian.
"What will happen?
Most wretched lies the earth which you have made.
The trees which you have planted, leafless stand.

1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

he sat at the west, for his third at the north, and only for the fourth could he sit at the east. 223 783

The singers squatted in silence, until finally the guardian took the prayer stick from beside the eagle killer and, holding it in his hand, sang the first song. When he had finished, he passed the prayer stick over the body of the eagle killer, placing it first on his head and then stroking downward over his body. With each stroke, he blew outward, wishing for the eagle killer the same kind of success in life which he himself had had.

He then passed the prayer stick to the man at his right, and so it went counterclockwise around the circle, each man singing four songs and stroking the killer with the prayer stick. Some of the good luck auguries made at this time are quoted from an actual ceremony. 223 783 777

By a deer hunter.

1. Hail! Thus I do to you. Thus you will do in the future. A little way off stands a mountain. You will follow [tracks] around it; you will kill some game; you will feed yourself. Thus do I, as a good hunter, follow my game. I go forth in the morning; I kill my game; I feed myself.(16) 223 783 777 539A

By a runner.

2. Hail! Thus I do to you. You will be like me. I am so fast a runner that if anyone ever catches me I will give him all I have.(16)

By a hunter.

3. Hail! Thus I do to you. Thus you will find yourself doing. Thus I do. The flat land lies stretched out wide. I follow [tracks] across it. I walk and walk. I kill game. I eat it.(16)

When each man in the circle had sung four songs and had performed his act of purification, a cigarette was made by any man who had brought tobacco and was passed counterclockwise, each man receiving it from his neighbor with the kinship term and giving four puffs. The singing then proceeded as before. No one must sleep or go home until morning. Singers might rise and leave the circle, but the eagle killer must remain in position—upright, with legs straight before him, arms folded and head bowed. 223 783 [276] [516]

2: Underhill E-5 (1931-1935)1939 NU28 Papago NU28

the wise man might simply attain his position by the exhibition of good judgment. "If he showed sense, they would listen to him" (8). This is the standard exploit in tales of the orphan boy, who makes a good suggestion in meeting before he is considered old enough to speak. The important factors would seem to have been a man's practical sense and knowledge of traditions.

In the summer village the meeting was held in the Big House: in camp it was in a brush enclosure, or even a cleared space on the ground. The Keeper of the Meeting or the man who was acting as such built a fire in the center of the place to be used, called the people or had them called and sat down facing the east. (In a house or enclosure this would mean opposite the door.)

The wise men, as they arrived, took their places around the fire and the listeners behind them. The crier sat at the right of the Keeper. In villages where there was a speaker to put the leader's proposals the speaker sat at the right and the crier at the left. Some informants thought that each wise man had his allotted place which he occupied during life and which was assigned to a new wise man on his death (14). The same informant thought that the shamans, far from being excluded, had special places, at the north, south, east, and west of the circle, as they do at the drinking ceremony. At present certain prominent men are allowed by custom always to have seats near the Keeper, but there is no other formality.

Some informants thought that the Log always sat behind the Keeper ready to be sent on errands. Another said that when the meeting was held in a roofless enclosure, the fire was put outside it so as to deceive the Apache. One man then had the duty of running to the fire to bring an ember for lighting the cigarettes. He sat behind the Keeper and was called the peg, that is, the peg with which a hide is fastened down for drying (25).

The proper demeanor in this and all other assemblies was to sit on the heels with arms folded and head bent. The hair should be tied with a thong, so that there would be no disturbing motion of raising the hand to keep it from blowing. It was highly blameworthy to show signs of drowsiness and the offender would have a lighted cigarette thrust between his toes.

The men arrived in silence and when all were seated, the ceremonial cigarette was passed. This was a six inch tube of cane or cornhusk filled, in the earliest days, with wild tobacco. The Keeper lit this or had it lit by an assistant and puffed ceremonially with an invocation, "Now do I breathe out. It will reach you. You will send a benefit" (14). Or, "May he bless me, give me life and lead me along a good road." The power originally referred to was thought

3: Underhill E-5 (1931-1935) 1936
NU28 Papago NU28

never tasted anything like it. Wheat flour makes me sick! I think it has no strength. But when I am weak, when I am tired, my grandchildren make me gruel out of the wild seeds. That is *food*.

I used to help my mother. When I was very little I began to grind the seeds, just for a short time. When I was ten years old I did it all, for then a daughter should be able to take over the work and let her mother sit down to baskets. But I am telling you about the early days when I could only grind a little. Then we pulled the grinding slab inside the house by the fire and my mother knelt behind it. I picked the dirt out of the seeds and handed them to her, and the pot boiled on the hearth on the three stones that we kept there.

My father was very busy, for he was the chief of our village. People used to bring their quarrels to him, and I remember him sitting crosslegged under the arbor we had to keep off the sun, listening with his head bent and his arms folded, while people talked.

[684] "My daughter disappeared with a man on the last night of the maiden's dance. I want her beaten." "How many stripes?" "Twenty." "Fifteen," said my father. He was a gay man who liked to war and to gamble. He did not like to beat women.

Some days nobody would come, and then he would gamble with the other men, throwing the sticks that we use for dice, and then moving stones around a circle as many moves as there were marks on the stick. We used to hear the men singing in a low tone, before they threw, to give them luck:

[997] Down I shall throw
The smooth stone I shall move
Move it to the corner.

They smoked, too, and I can smell their tobacco yet, the strong wild tobacco that we do not have any more. It was tied in a long corn husk, so white, so nice, and when one man passed it to another he said: "Friend!" And the other said, "Friend."

When the sun was high, high, my brothers and my sister came home, and as each one came my mother gave them food. She dipped the gruel out of the pot into a bowl, for my mother was a good potter. We all had bowls in our house. Only my father and my mother ate out of the same one laughing together, because they liked each other. When my mother dipped out our food she said: "Do not eat it hot. You will have wrinkles." She set mine on the grinding slab to cool. "It will make you industrious," my mother said. My father said to the boys: "Do not eat it hot, no matter

3: Underhill E-5 (1931-1935) 1936
NU28 Papago NU28

Where the mountain trembles with the thunder 159x
My heart trembles with it. 533

That was what they sang. When I sing that song yet it makes me dance.

Then the little rains began to come. We had jugs of the juice that my 159x
mother had boiled, and all the women carried them in their nets as we came 276
running down the mountain back to our village. Much, much liquor we 821
made, and we drank it to pull down the clouds, for that is what we call 786
it. I was too little to drink. They put me on the house top with my older sister. Our jars of liquor were up there, too. The house top was the only safe place.

We heard the people singing over by the council house:

There sits the magician of the east
Holding the rain by the hand
The wind holding by the hand
He sits.

Then they began to drink. Making themselves beautifully drunk, for 159x
that is how our words have it. People must all make themselves drunk like 276
plants in the rain and they must sing for happiness. We heard them singing 786
all day all over the village. Then my father and mother came and stood by the house where we were on the roof, with many relatives. Oh, they were very happy. "Reach us down a new jar from the roof," they said. So my sister handed it down. Then they gave it to drink to all the relatives whom they loved. And each, when he had drunk, sang a song.

The next day a relative came and said: "Your father and mother are out by the arroyo sleeping. Let a child go and stay with them until they wake." So my sister went. My brothers were drunk, too, but we did not know where. At last my father and mother awoke and came home very happy. For many days they sang.

II

My father told my mother: "There is going to be a big war party. We 159x
have sent men to run to the Place of the Burnt Seeds and the Buffalo Head 721
and Where the Willows Grow and Where the Owls Hoot and to Hackberry Pond. They are to meet us in ten days at the foot of the hills where the Apaches live."

My mother was frightened. It was near her time to menstruate and she 159x
was afraid it would not be over before my father wanted to go. Then he 721
would have to stay home, because a menstruating wife would weaken him 841
so he would be killed. My mother was careful about that. She went out of

4: Joseph et al D, E-5 (1942-1943) 1949
NU28 Papago NU28

883 The adolescent boy is always casual and friendly with the women of the household. When the men are at home, they join the women working under the ramada, and everyone participates in the chatter and joking that ensues. Though most of the time the youth is away from his female relatives, he often stops at the house cluster for a few minutes during the day, bringing the women news of their men and any local gossip he has picked up. He occasionally lifts a heavy article for them or is helpful in some other way but is no longer expected to make himself generally useful around the house.

Outside the household the teen-age boy's most intimate associates are lads of his own age, but he is not limited to boys of his own village, for in herding or at the intervillage roundups he always meets and works with youths from other communities. It is not difficult to maintain these friendships, as a boy can usually catch a ride to another village or go on his own horse.

883 533 Many Papago boys of this age learn to play musical instruments, usually the violin or guitar. They play entirely by ear, learning the Mexican and American dance tunes from phonograph records. Two or three lads may spend many hours practicing together; the others always enjoy listening. Rarely does a boy under eighteen become proficient enough to play in the orchestra at a fiesta, except as a drummer, but, if he is an unusually good musician, he may replace a violinist or guitarist while the older man rests or eats.

883 527 292 Fiestas are great occasions for adolescent boys. They help to clean and decorate the dance ground and feast house. They keep the fires going and spread hot coals near the women's benches. For the celebration they dress in colorful cowboy clothes: freshly polished high-heeled boots, wide-brimmed hats, new jeans, bright silk shirts, and often leather belts or wristguards studded with colored glass.

882 527 273 The boys take no part in the religious phase of the fiesta, nor do they enter the church for rest as the girls of their age do. As they are too young to associate freely with men, but yet feel themselves much too grown up to stay with the women or play with small boys, the lads usually stand about the big fires and sometimes loiter around the parked cars where the bootleggers do business. It is not uncommon for boys as young as sixteen to have whiskey at a fiesta, but ordinarily they do much less drinking than the men. Some of the boys cannot afford expensive bootleg whiskey, and others are still under the influence of their mothers and grandmothers, who dread heavy drinking. At any rate, few teen-age boys are involved in drunken fighting. Boys smoke openly and without fear of reprimand as soon as they have money for cigarettes.

[276]

883 The boys do not dance so constantly as the girls of their age, for they never

[Text continues on p. 156 - Analyst]

5: Castetter & Bell N-5 (1938-1940 1942
NU28 Papago NU28
Pima NU29

specific reference to their cultivation. Although there are no archaeological specimens of gourds known from the Piman or Hohokam cultures, both fruits and seeds of *Lagenaria* have been recovered from the Canyon Creek Ruin[84] and from Tonto Cave which are on the edge of the Piman territory (see Chapter III).

Tobacco

In point of time, the first tobacco smoked by the Papago and Pima was *Nicotiana trigonophylla* Dunal, known as "Coyote's tobacco." This wild species is found from the western borders of Texas to southeastern California and southward, growing in many places throughout Arizona, and in considerable abundance in northern Mexico. It is a common weed in southern Arizona desert foothills and mountains, on plains at altitudes of four to five thousand feet, on alluvial river valley soils, and is found in a number of places on the Sells Reservation. The species also occurs, although not in abundance, in central and northern Arizona at altitudes of four to five thousand feet. This is referred to by the Papago as the tobacco which Elder Brother gave them and therefore as ancient, and it is still used by them to some extent. Those Papago who could do so made expeditions to some of the mountains in southern Arizona to secure it for their own use and for trade, particularly to the Pima who used it to a lesser extent, since, in more recent times at least, they have depended largely upon cultivated tobacco. That it was not extensively used by the Pima is indicated by the fact that some of our informants had never heard of it. It was never cultivated or even semi-cultivated, and among the Papago at least the indication is that it was smoked before they grew tobacco. Both tribes regarded it as inferior in strength and quality to common tobacco (*N. Tabacum*).

Setchell[85] refers to *N. trigonophylla* as occurring in the

[84] Haury, *The Canyon Creek Ruin*, pls. XLVII, XLVIII.
[85] Setchell, *Aboriginal Tobaccos*, p. 413.

5: Castetter & Bell N-5 (1938-1940) 1942
NU28 Papago NU28
Pima NU29

lower portion of the area occupied by *N. attenuata* Torr., where the latter species is the one usually employed for smoking. He also identified as *N. trigonophylla* a specimen collected by Dr. Edward Palmer, and now in the U. S. National Museum (no. 13478). Maxon[96] informs us that the notation on this specimen simply states it was collected in Arizona in 1885, gives no locality, and bears the statement "Used for tobacco by the Yuma Indians." Spier[97] writes of the Havasupai using two kinds of tobacco, both growing wild in the neighborhood and at least one of which was cultivated. The species known to these Indians as "Coyote's tobacco" was *N. trigonophylla*, but the other more commonly used one has not been identified. The Hopi smoked and semi-cultivated both *N. trigonophylla* and *N. attenuata*.[98]

The Pima and Papago smoked to some extent, but never cultivated, *N. attenuata*, which has a wide distribution in western North America and occurs on prairies and plains in central and northern Arizona at altitudes of five thousand to seventy-five hundred feet. We have seen vast areas spotted with sections practically covered with this plant. More recently, the Pima use of it has been confined to the boys when they wanted to "sneak" a smoke. A Pima informant referred to it as the "uncle" of cultivated tobacco. Russell[99] wrote of the Pima calling this species "under-the-creosote-bush tobacco," a statement which we have been unable to confirm; in fact, our Pima informants had never before heard this name. The "under-the-creosote-bush tobacco" of the Papago was *N. Tabacum*. The Maricopa[100] commonly used a wild tobacco known as "mesquite tobacco," so called because

[96] Wm. R. Maxon, Curator, Division of Plants, U. S. National Museum, Personal correspondence, Jan. 25, 1940.

[97] Spier, *Havasupai Ethnography*, pp. 105, 119.

[98] Whiting, *Ethnobotany of the Hopi*, pp. 16, 17, 40, 90; Hough, *The Hopi in Relation to Their Plant Environment*, p. 38.

[99] Russell, *op. cit.*, p. 119n.

[100] Spier, *Yuman Tribes*, p. 333.

5: Castetter & Bell N-5 (1938-1940 1942
NU28 Papago NU28
Pima NV29

it grew beneath mesquite trees. This name was wholly unfamiliar to our Piman informants.

A third native species, *N. Bigelovii*, designated "Coyote tobacco," was reported by Russell as having been used by the Pima for smoking. In spite of considerable effort we have been unable to confirm the use of this species by the Pima, or even to ascertain that it grows in Arizona. Thornber[101] writes that he has heard it occurs in the state, but the herbarium of the University of Arizona contains no specimens of this species from Arizona. It was smoked to some extent by the Arizona Indians, but where they secured it has not been ascertained although its distribution would indicate they may have obtained it from the Indians of southern California, just as the Maricopa[102] got tobacco by trade from the Akwa'ala in Lower California.

Both Papago and Pima are known to have cultivated the common tobacco, *N. Tabacum* L., for a number of years, although it has been impossible to ascertain when or where they first obtained it. Emory,[103] who visited the Pima in 1846, and Bartlett, there in 1852, both mentioned Pima crops but neither made any reference to the cultivation of tobacco. However, Browne[104] wrote in 1874 of its being raised by the Pimas, who planted it when the mesquite trees began to leaf out. Also the Papago at San Xavier, as well as the Pima at Sacaton, are known to have been growing *N. Tabacum* in 1903;[105] and Lumholtz,[106] writing in 1912, referred to the Papago cultivating tobacco. Gray[107] says the "Yaqui tobacco" found cultivated in Arizona by Dr. Edward Palmer, and specimens of which were grown in the Botanic Garden of

101 J. J. Thornber, Personal correspondence, Feb. 13, 1940.
102 Spier, *loc. cit.*
103 Emory, *Notes;* Bartlett, *Narrative.*
104 Browne, *Adventures in the Apache Country*, p. 109.
105 Thornber, *loc. cit.;* Lloyd, *Aw-aw-tam Indian Nights*, p. 58.
106 Lumholtz, *New Trails*, p. 52.
107 Gray, *Synoptical Flora of North America*, II, pt. 1, 241; C. A. Weatherby, Senior Curator, Gray Herbarium, Harvard University, Personal correspondence, Feb. 26, 1940.

5: Castetter & Bell N-5 (1938-1940) 1942
NU28 Papago NU28
Pima NU29

Harvard University in 1871 from seed furnished by Palmer, probably belongs to *N. Tabacum* var. *undulata* Sendtner. Informants said the Papago had always raised tobacco, also that corn and tobacco are of equal age on the earth. However, one Papago informant, seventy-seven years of age, said that when he was a little boy his grandfather used to smoke "Coyote's tobacco" *(N. trigonophylla)*, but also had the common "Mexican tobacco" which they got from Mexico by trade for deer skins. It seems quite certain that *N. Tabacum*, north of Mexico at least, was unknown in aboriginal use.[108]

N. Tabacum, referred to by the Papago as "under-the-creosote-bush tobacco," is also spoken of as "real tobacco." It is reported as the only species cultivated, and informants said that in early days almost every family had a tobacco patch. A specimen was obtained from Bernabé López at San Pedro village under the name of "under-the-creosote-bush tobacco" and was identified by Goodspeed[109] as a pink-flowered variety of *N. Tabacum*.

Two seed samples secured from different informants were identified by Goodspeed as *N. rustica*. Informant Vanico had grown this species for many years and Manuel Lowe had grown it years ago; the latter said it was known as "Coyote's tobacco." Spier[110] reports that the Maricopa secured "real tobacco" from the Pima who cultivated it.

Leaves of the wild species of *Nicotiana*, whenever used by either tribe, were gathered, dried and stored, but generally not mixed with the cultivated tobacco. They preferred to smoke the cultivated tobacco, but when it was not available would smoke the wild species. However, when the supply of common tobacco was nearly exhausted it might be mixed with the wild species. For the most part the Pima, and to a

[108] Setchell, *op. cit.*, p. 401; T. H. Goodspeed, Professor of Botany, University of California, Personal correspondence, Jan. 30, 1940.
[109] Goodspeed, *loc. cit.*
[110] Spier, *loc. cit.*

5: Castetter & Bell N-5 (1938-1940 1942
NU28 Papago NU28
Pima NU29

Pi Pa 249 276 lesser extent the Papago, now secure their tobacco from the whites and rarely grow it.

The Papago and Pima seldom smoked by itself any wild plant other than *Nicotiana*, nor did they usually mix any wild plant with tobacco to dilute it or to economize, for they liked it strong. However, a lichen known as "earth flowers," which grows on mountains in southern Arizona, was occasionally dried and a small amount mixed with the tobacco. We were unable to secure a specimen of this plant; the one secured by Underhill several years ago and seen by the authors was not in condition to make determination possible. It now seems certain from our investigations with both Papago and Pima informants that this is not the *pihol* flowers referred to by Densmore.[111] One professed to be acquainted with *piholt*, described as a desert plant which when in bloom smelled something like "earth flowers." The lichen used was described by our informants as having a strong sweet smell, being somewhat narcotic and of such magical properties that smoking a little of it mixed with tobacco would attract game while hunting. One informant said sometimes dried tepary leaves were mixed with tobacco, the smoker expressing a wish for a large crop of teparies next season.

Pi Pa 276 194 It has been impossible for us to determine the antiquity of tobacco smoking or cultivation among the Pima-Papago. The early documentary material is strangely silent as regards both its cultivation and smoking, although it makes frequent mention that these Indians were extremely glad to receive gifts of tobacco.[112] Moreover, archaeology throws no light on the problem among the Hohokam and Piman cultures. Pertinent to the situation along the middle Gila, however, are specimens from Casa Grande National Monument. In 1935 reed pipes from this site were sent for examination to the Ethnobiological Laboratory of the University of Michi-

111 Densmore, *Papago Music*, pp. 210-11.
112 Coues, *On the Trail*, I, 106, 109; Bolton, *Anza*, III, 18, 232; IV, 44.

5: Castetter & Bell N-5 (1938-1940) 1942
NU28 Papago NU28
Pima NU29

gan by Charles R. Steen, Ranger. Jones[113] reported that these pipes (as well as others taken from a ceremonial cave on Camelback Mountain near Phoenix) were made of reed grass (*Phragmites communis*). The pipes from Casa Grande were wrapped with cotton cloth, and both lots were stuffed with leaves of creosote bush as well as broken tobacco leaves. Jones is of the opinion that these are probably leaves of *N. attenuata*. In this same connection it is interesting to note that Fewkes[114] found large numbers of "cane cigarettes" in various rooms at the Casa Grande ruin as well as in caves near Superstition Mountain to the north of the ruin. Of special interest is the fact that he found a small dish of *N. attenuata* in one of the ruins at Casa Grande.

It is our firm belief that neither Papago nor Pima cultivated any kind of tobacco aboriginally, a situation in agreement with that for the Maricopa[115] who were adjacent to the Pima on the Gila, but that they did smoke the wild *N. trigonophylla* and *N. attenuata*.

Martynia

Pima and Papago anciently utilized the pods of devil's claw or unicorn plant (*Martynia louisiana*) in basketry. Although informants asserted that the Pimans cultivated this plant a very long time ago it is impossible to establish this definitely. It is possible that aboriginally they utilized only wild plants of *Martynia*, and that its cultivation came with the commercial stimulus to increased production of baskets.

There were two kinds of devil's claw—a black-seeded variety which grew wild, and a cultivated form with longer pods and white seeds, the longer strips of epidermal tissue being more suitable for making baskets. The white-seeded variety never grew wild but often appeared as a volunteer in cultivated fields.

[113] Jones, *Ceremonial Cigarettes*.
[114] Fewkes, *Casa Grande*, pp. 142-43.
[115] Spier, *loc. cit.*

5: Castetter & Bell N-5 (1938-1940 1942
NU28 Papago NU28
Pima NU29

Chapter IX

CULTIVATION AND UTILIZATION OF TOBACCO —A CEREMONIAL CROP[1]

The growing of tobacco must be looked upon as ceremonial agriculture, and the smoking of it as an essentially ceremonial practice. It is, therefore, impossible to understand the cultivation of tobacco without taking this ritualistic aspect into consideration, and for this reason it is here considered apart from the growing of other crops.

Among both Papago and Pima, tobacco was regularly grown only by old, rather than young, men although any man had the presumptive right to grow it if he knew its culture and the song. There were two reasons for this limitation to old men—first, a man ordinarily had to be fully grown before he could use tobacco, second, having less to do, the old men had time to grow it.

The Traditional Origin of Tobacco

Bernabé López[2] gave the following account of the origin of tobacco:

There was once an old woman who had a grandson and she told him that when she died he should take her out where the ground was soft, fertile, and where the water came down, and bury her, but not to let anyone see where he had buried her. He should then go back to the burial spot at the end of four days and he would see a small plant coming up on her grave. This he did, and again visited the spot at the end of another four days and found the plant had grown to a nice

[1] For the botanical aspects of Pimaan tobacco see Chaper IV.

[2] Bernabé López pointed out that his account of the origin, cultivation and smoking of tobacco applied to San Pedro and Coyote Papago villages, and that if we should get accounts from informants at other villages these would be slightly different in certain respects. Informants in general agreed that such inter-village differences existed.

5: Castetter & Bell N-5 (1938-1940 1942
NU28 Papago NU28
Pima NU29

The mature leaves were dried by the Papago in the sun on a sotol mat outside the house, or on a piece of ground swept clean for the purpose, and were regarded as ready for smoking when about half dried and very bitter. Leaves were usually dried by the Pima on a cotton blanket, either in the sun or the house, and stirred occasionally with a stick to facilitate this process. If a Papago wanted to use the tobacco before it was fully dried, some leaves would be toasted on a piece of olla over hot coals. However, customarily the leaves were fully dried in the sun and stored without breaking, or first rolled into balls before they were fully dried. They were then placed in an olla or gourd, covered with a piece of broken olla, and sealed with mud mixed with "sticky grass." This dried tobacco might be stored in real bird nests kept in the house, but often in a cavity made by the red-shafted flicker *(Colaptes cafer collaris)* in a sahuaro tree. The Pima knew that leaves dried more rapidly in the sun, but those dried indoors were stronger and made better smoking, as the leaves curled somewhat and seemed thicker than the sun-dried ones; they were rolled and pressed into an olla and a cotton cloth tied over the top, or sealed by placing a shaped piece of broken olla over the opening and securing it with mud. This was for the purpose of keeping out moisture and insects. Neither in drying the leaves nor in putting them into the olla was any particular care taken to keep the leaves unbroken. The olla was stored in the brush house. When a quantity was wanted for smoking, the olla cover was removed, a few handfuls placed in a buckskin (or in later times canvas) pouch, then the olla resealed. This tobacco was very strong.

Among both Papago and Pima, the seeds, pods and flowers were not smoked, but occasionally if a man's supply were low he might crush and mix pieces of small stems with the leaves.

The Pima, after harvesting the ripe leaves, pulled up the plants at the end of the season, and tied them in bundles for storage. Leaves left on these plants matured more or less, were called "third tobacco," and were also smoked. The

5: Castetter & Bell N-5 (1938-1940) 1942
NU28 Papago NU28
Pima NU29

naked plants were placed on top of the house, never thrown away or burned, for tobacco was regarded as a man. When time came for making "wine" from sahuaro fruit, these stems were placed on top of dead ashes on the ground and the wine pots set upon them. Finally the stems were disposed of by burying in a pile of ashes.

After the Papago had gathered all leaves from the plants, a number of pods were gathered for seed, leaving the stalks standing. Pods were dried in an olla and stored in a gourd, sealed with mud mixed with "sticky grass," and kept in the house; or the seed might be stored in a hole in a giant cactus made by the red-shafted flicker. The Papago did not select their tobacco seed, because they usually needed to gather all available. But among the Pima, seed was selected from those plants which were tallest and had the largest pods. Late seed might also be gathered, but if so it was planted by itself because it did not do as well. The seed was cleaned and placed in a gourd, which was sealed with the gummy secretion from the creosote bush, then stored in the ground. Occasionally, however, among these Pima whole plants bearing seed pods were pulled up, dried and hung up indoors, this constituting the seed supply. Tobacco seed was considered by both tribes as very valuable and sometimes given as gifts.

Ritualistic Aspects of Tobacco Cultivation

Unlike some tribes, neither Papago nor Pima considered that other crops grown with tobacco would be injured. However, the Papago never grew tobacco in their fields, for it must be grown in secret and a man must be in the right spirit when planting. One who planted it must not let anyone see him do so, and, when visiting his tobacco patch which was out of sight of all the other fields, took a circuitous route so that no one would suspect or learn where he was going. If someone discovered the patch and saw the young plants, they would dry up. After plants were grown there was no objection to others seeing them, as no damage could result.

5: Castetter & Bell N-5 (1938-1940) 1942
NU28 Papago NU28
Pima . NU29

SMOKING

Pima usually carried tobacco in a special buckskin or foxskin pouch, decorated with sun symbols in bright colors and rattles, sometimes fringed, and closed with a flap folding over the top or occasionally with a drawstring. The simplest Papago pouches were a circular piece of dressed buckskin with a fringe around the entire edge, and tied up with a thong. Others were made of rabbit, or sometimes fox, skin with the fur left on. All present-day Papago pouches are of buckskin, dyed red with the root of *Krameria glandulosa*. They are made of two semi-circular pieces sewed together with fringe around the seam and a flap fastened by a knot or thong serving as a button.[4]

Papago and Pima had no true pipes, a fact mentioned by Lloyd[5] in 1911. Cigarettes for smoking tobacco were made usually from tubular stem sections of pigweed, or *bledo (Amaranthus Palmeri)*. These were from one-fourth to nearly an inch across, and six to eight inches long, cut when the plants were mature, dried and the pith bored out. After coating with a layer of gummy secretion from the mesquite tree, they were ready for use. A Papago informant said the *Amaranthus* stems were being used for smoking when he was a boy, but that reed grass *(Phragmites communis)* stems had been utilized at an earlier time and had fallen into disuse due to scarcity and consequent difficulty in finding them. This reed grass does not occur in southern Arizona (except along the Colorado), but is found along streams in Apache, Navaho and Coconino counties.[6] Russell[7] states that it was formerly common along the Gila. Rolled cigarettes, made by wrapping tobacco in inner corn husks, seem to have been a later development among both peoples. Any special gathering for the good of the tribe or ceremonial occasion demanded

[4] Castetter and Underhill, *Ethnobiology of the Papago Indians*, p. 50.
[5] Lloyd, *Au-au-tam Indian Nights*, p. 89.
[6] J. J. Thornber, Personal correspondence, Feb. 15, 1940.
[7] Russell, *op. cit.*, p. 134.

5: Castetter & Bell N-5 (1938-1940 1942
NU28 Papago NU28
Pima NU29

that smoking be done only with the reed grass cigarette, never with corn husks. This was true for both Papago and Pima. Lloyd[8] observed that the ceremonial pipes of reed grass had bunches of small bird feathers tied to them. Corn husks to be used for cigarettes were selected when the corn was being shucked, and by each man for himself; only the soft, white inner husks were saved, and these stored in an arrowweed basket. These cigarettes were six to eight inches long and tied at both ends with shreds of corn husk. Often the cigarette was not all smoked at one time, as tobacco was scarce.

Smoking was practically universal among older Papago and Pima men, but less common among women and practically forbidden for young men. By both tribes it was considered injurious to young men, weakening them, causing a cough, making them lazy and fat, or unable to stand cold and preventing them from being alert. They did not believe it injured old men in any way. A father's usual reply to his son who requested permission to smoke was, "I will let you smoke after you have killed a coyote." In modern times, this restriction as regards smoking by young men largely has broken down, particularly among the Pima.

Tobacco was not chewed nor used as an emetic by either Papago or Pima.

To both tribes, smoking was essentially a ceremonial performance, and it had to be tobacco *(Nicotiana)* that was smoked, for it was regarded as having power and no other plant possessed equal efficacy.

Ceremonial smoking in a circuit, using only the reed grass cigarette, was fundamentally similar among Pima and Papago, although differing in detail. It was done only on a few special occasions, such as a party preparing for war, deciding on going on a hunt, having a race with another village, or, in fact, a discussion of any tribal problem, and was regarded as an aid in securing supernatural guidance at

[8] Lloyd, *loc. cit.*

5: Castetter & Bell N-5 (1938-1940) 1942
NU28 Papago NU28
Pima NU29

such times. When either tribe had such council meetings to settle common problems, the men first talked for a while, then the one in charge of the meeting (usually the chief) took a hollow section of *Amaranthus Palmeri* or *Phragmites communis* stem, filled it with tobacco and lighted it. After taking the ritual number of four puffs he handed it on to the man at his right, always counter-clockwise. In warrior circles, it was moved along near the ground, with the words, "It is traveling low—sneaking like a warrior." Each man took four puffs and similarly passed it to his right, and so on until the cigarette had gone around the entire circle. As each moved the cigarette along to the next, he called him by his kinship term, such as brother, uncle, cousin etc., this conveying the expression of friendly feeling. On its return to the one who lighted it, it was stuck into a small pile of ashes at his side. The men (among both tribes) then discussed the topic of the evening for a time, and when all had agreed on the issue in question, the chief relighted the cigarette and passed it around the circle just as before; or, if the problem were a knotty one requiring lengthy discussion, the cigarette might be relighted and again go the rounds. The main reason for all smoking the same cigarette at the meeting was, in the view of these Indians, to develop a unity of thought, spirit and purpose.

In ceremonies or meetings, each man blew the smoke upward to a Spirit in the heavens, upon whom he was calling for help or guidance in making decisions. Some informants, particularly among the Pima, asserted that the great power called upon was the sun. Smoking, both group and individual, was regarded as a sort of prayer—a medium of communication between the smoker and the Great Spirit, while the smoke itself was a means of gaining an audience, as well as the bearer of messages. Procedures and sequences in this ritual circuit smoking were always in fours, but smoke was not blown in the several directions as was customary among some tribes.

5: Castetter & Bell N-5 (1938-1940 1942
NU28 Papago NU28
Pima NU29

When smoking individually, a man might do so merely for pleasure or to communicate with the Great Spirit. Thus, while out walking somewhere, he might sit down to smoke and blow the smoke upward as a kind of unexpressed or incipient prayer, meanwhile talking to the tobacco or the smoke. But, in such cases, he must always finish the cigarette; that is, smoke it to a short stub, then roll it into a ball and gently place it on, or stick it into, the ground. A Papago, while smoking, must talk to the smoke which carried his prayer, else it would have no virtue. A man in trouble always smoked, and it was customary to do so before engaging in any endeavor, either personal or collective, for this was looked upon as a great help. It was done either to obtain aid for specific things or for the general welfare, such as planting, seeking rain, securing good crops, curing, health, preparing for warfare, sports etc. In planting or otherwise caring for his crops, a man, while smoking, blew smoke over the field, asking the Great Spirit that his crop grow well, that he have a good crop and that his relatives might benefit thereby. A man planning to run a race against someone from another village might blow smoke toward that village. In this case he would not talk to the Spirit but would say to his opponent, "You are not a great runner, I can beat you." He might also blow smoke toward the Apache when preparing to go to war against them, or toward the Gulf of Mexico when preparing for a salt expedition. One could talk to the Spirit without smoking, but smoking was thought to be an aid.

Pima informants said that to them everything was mysterious, and for this reason prayed to the darkness. At night a Pima would smoke and blow the smoke on his breast saying, "Kind darkness, give me good rest and good dreams and may nothing harm me." They also had great respect for the sun, well-nigh amounting to worship. In the morning the Pima would blow his smoke toward the sun saying, "Oh kind traveling sun, pity me. Give me the strength that whatever

5: Castetter & Bell N-5 (1938-1940) 1942
NU28 Papago NU28
Pima NU29

work I undertake I may accomplish easily through your power." Pi 772

Both Papago and Pima regarded tobacco smoke as a purifying agent possessing definite curative properties, and smoking was believed to clear one's mind so that he could think better. The shaman, while singing for a patient to ascertain the cause of illness, paused at regular intervals to smoke and puff it over the patient as a means of cleansing or driving out the causative agent, the idea of prayer also being associated with the smoking. The shaman did not grow tobacco for himself; he either hunted wild tobacco or it was given to him, as the Pimans held their shamans in high regard. A Papago man who had come into contact with the supernatural by killing an enemy or an eagle, or by joining the salt pilgrimage, needed to be purified by a period of segregation and fasting. When this period was ended, older men who had gone through the same experience sang a series of ritual songs. Then each separately approached the novice and blew tobacco smoke over him, this portending success for his future.[9] Pi Pa 276 755 783

Smoking was essential while holding the ceremony for rain, and this was done by shamans, whose special task it was to see that the ceremony was held once a year (see fig. 5). They got together for four days and smoked, and their helpers danced. While smoking, these men searched for rain clouds and called on them to come. It was the office of this class of shamans to make it rain, and rainmaking was not a function of the general population. Pi Pa 276 789

[9] Castetter and Underhill, *op. cit.*, pp. 76-7.

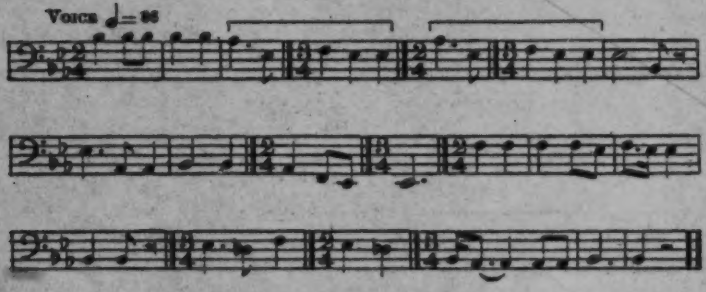
6: Densmore E-5 (1920) 1929NU28 Papago NU28

X 533 found this and drunk the water. In old times Vĭnikût was farm land, but the parents of the children did not remember this nor think the children might have strayed there.

No. 105. Song Concerning the Lost Children

(Catalogue No. 995)

Recorded by MATTHIAS HENDRICKS



TRANSLATION

Vĭnikût fields I got into.
I stayed there and my heart will be wet enough to last.

Analysis.—In this song concerning the lost children we have a wandering melody with the unusual compass of 12 tones. An ascending ninth occurs midway through the song and the ascending interval at the close suggests a query. A quarter of the intervals are fourths, which is an unusually large proportion of this interval. It is interesting to compare the rhythmic unit with measures 8 and 9 and 16 and 17, in which the note values are the same but the accent is different.

344 796 273 276 The lodge for the making of tiswin was erected near the lodge of the chief at Santa Rosa. This was visited and photographed. (Pl. 19, *c*.) It was round in shape with only one opening, a door toward the east. The lodge consisted of a framework covered with grass having tree branches or the long stems of the ocatillo cactus on the outside. Preparation for the August festival included the making of a large quantity of cigarettes for every one to use freely. These were made of native tobacco, rolled in corn husks.

796 273 The persons taking part in the ceremony comprised a leader for the entire ceremony, the men who mixed the tiswin and one man who tasted it, four men who watched the ollas in the lodge during the period of fermentation, four medicine men who made the rain divinations, and the singers, whose number was not prescribed, though 16 was the usual number, this permitting four men to be seated at and between the cardinal points during the distribution of the wine. At the four cardinal points were shallow holes with straw in them. The ollas were placed in these holes during the period of fermentation.

6: Densmore E-5 (1920)1929 NU28 Papago NU28

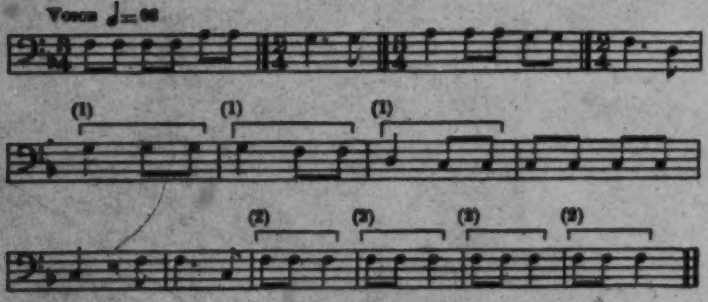
Observing this, the people asked the father if he had done either of these things, and if he admitted his fault they sent for a man who could sing the following song. It was not considered necessary to send for a medicine man, as the cause of the trouble and its cure were known. The man mixed dried *pĭăl* flowers with tobacco and smoked the mixture as he treated the child.

533X 943 224 [276]

No. 160. Song for Success in Hunting

(Catalogue No. 1012) 533X

Recorded by JOSE MANUEL



TRANSLATION

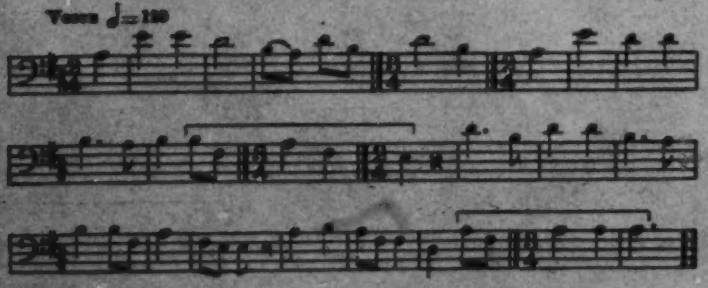
We sit here by our camp fire and start to sing our hunting song. I can clearly see the points of the deer's ears on top of the hill. We smoke the *pĭăl* flowers that make the night clear, so I can see the points of the deer's ears on the hill.

Analysis.—Two rhythmic units occur in this song, the second reversing the note values of the first. The song is based on the fourth five-toned scale and about one-third of the intervals are fourths.

No. 161. Song of an Unsuccessful Hunter

(Catalogue No. 1018)

Recorded by JOSE MANUEL



TRANSLATION

I am walking a great deal.
I am sorry I can not find any game.
I saw lots of tracks, especially on the east side of the mountain, but I found nothing.

7: Lumholtz N-5 (1909-1910)1912
NU28 Papago NU28

796 material, considered by the Indians as its blanket, which, when the basket is in use, is placed on the ground for it to "sit" on.

Around these holy men and the fire and the long string of plumes that stretched across, danced men and women, holding each other by the hand and moving around in a circle. They marched in time, with firm steps, placing left foot behind right, and proceeding in this way against the sun's apparent movement. They all sang in [534] unison and in time with their steps, the leader swinging a rattle, and he and those nearest to him exerting their lungs to their fullest capacity. There were always two or three walking ahead of him, as everybody was eager to [533] be near the leader in order to catch the tune. In this advance guard there was also a female leader, a soprano. What a wealth of songs there is among these Indians! During the two nights new songs were presented all the time, not only new texts but even new, though somewhat similar, melodies. People were sitting or lying around the circle of dancers, stepping into it whenever their fancy moved them.

When four songs had been sung, taking about an [276] hour, a short pause was made, and the performers would sit down, many of them smoking. After a few minutes, only the leader would rise, and, standing in front of the jacal with his face toward the east, he would sing one verse of the song they were going to take up next, this time in a low voice, just to refresh their memories. Then he would step forward, dancing again and bursting forth into loud singing, immediately joined by the multitude in

7: Lumholtz N-5 (1909-1910)1912
NU28 Papago NU28

huaro ribs, surmounted with greasewood twigs and some large coarse grass called sacáte colorado. The grass is kept in place by hoops of ocotillo inside and outside, placed at intervals of eight or ten inches. The top of the house is covered with earth.

The entrance is small, usually only two and one-half feet high and two feet wide, and is provided with a grass door which, when not in active use, leans up against the wall outside. To get in or out one is obliged to crawl on hands and knees. The fire is made in the centre, and there is no other escape for the smoke than the door, there being no window; as the people inside generally sit on the ground, the smoke does not trouble them; besides, as the house is warm, a large fire is not needed. In the summer these dwellings are delightfully cool, affording also excellent protection against the violent, though short-lasting, rain-storms of the desert.

Usually a light stockade of ocotillo and other kinds of poles runs around the lodge to prevent the cattle from eating the grass of which it is made. In this house the youth are instructed in the traditions and beliefs of the tribe, and here is discussed everything of more or less importance, meetings being held every evening of the year. The man who is in charge of the lodge and its sacred objects is elected for life. He lives near by and is called Keeper of the Smoke, which means tobacco smoke. The name for tobacco is *viv;* when used for certain sacred purposes it is called coyote tobacco (*pan vivuka*). The young plants are covered with greasewood branches, but the Papagoes nowadays rarely grow the weed and

7: Lumholtz N-5 (1909-1910) 1912
NU28 Papago NU28

usually commercial brands have to be resorted to. It is 276 ●
smoked in corn husks. The leaves of *viopóli*, a bush in
the foot-hills, are also sometimes smoked.

In the afternoon the leading men began to wake 280
from their slumber and, as there were many features of
the feast I desired to have explained to me, I induced
them to have a conference. Outside of the house of the [513]
Keeper of the Smoke there was some convenient shade
and, stretched on a mat with the rest, I had a couple of
hours of very interesting conversation. Many years
amongst the Indians gave me some knowledge of the
fundamental traits of their religious ideas, which evi-
dently very much surprised those present. They had
such fine faces, full of determination and sincerity!
Ragged and poor though these people were, I could not
help admiring the expression of their countenances, es-
pecially those of the principal men, flushed with enthu-
siasm attendant on the festival. They gave me clear
and unequivocal answers. When I had finished all my
questions one medicine-man said: "I suppose he is one
of those white men who want us to give up all our an-
cient beliefs and customs." Assured on this point, they
said they were glad to have me remain at the rancheria
as long as I wished. They also informed me of a cal- [173]
endar record preserved by a man who lived in the Babo-
quivari Range. Of this I made a note as the object for
an excursion.

"Might I see what was inside the long basket on the 778
dancing places?" I asked. This they could not very well
do. Few of the Indians themselves had seen it, they

17:Castetter & Underhill N,E-5 (1931-1934) 1935
NU28 Papago NU28

273 The only important intoxicating beverage is a sort of cider made from the giant cactus fruit *(Carnegia gigantea)*. In districts where it grows it is brewed once a year by each village with elaborate ceremony, the brewing, the drinking and the actual intoxication being part of the ritual for bringing rain.

When the beverage is to be made every family contributes a jar of boiled juice to the large jars ceremonially guarded in the council house. At present each family also makes several jars for home consumption. As soon as the juice is decanted from its air-tight receptacles, it is mixed with four times the quantity of water, the ideal being a mild intoxicant which can be taken in quantity. A small fire is lighted in the council house to keep up a steady moderate heat, and official tasters direct the fermenting process. They usually have a small jar of the liquid, already fermented, from which they add some to the large jars if fermentation is too slow. Individual Indians bury their jars in the ground to obtain heat. The established fermenting time is seventy-two hours.

The resulting drink, called *navai't*, is a crimson-colored sort of cider with a slightly nauseating taste, which, when drunk in the ritual quantity induces vomiting. This beverage is almost impossible to keep, therefore the tradition is that the whole supply must be consumed within twenty-four hours.

A similar drink, made from the pitahaya or organ pipe cactus fruit *(Lemaireocereus thurberi)*, was used in the southern part of the Papago territory, and constituted the ceremonial drink for that area. Fermented drinks were once made from the prickly pear fruit *(Opuntia engelmannii)* and from the fruit of the lote bush *(Zizyphus lycioides)*; these were never extensively used, however, and had no ceremonial significance.

●276 The Jimson weed *(Datura meteloides)* grows plentifully in the region but in spite of its use by neighboring Yuma, Zuñi, Ute, and some California Indians as a narcotic,

17:Castetter & Underhill N.E-5 (1931-1934) 1935
NU28 Papago NU28

informants insisted that a decoction of the root was drunk only occasionally by private individuals among the Papagos.

Peyote *(Lophophora williamsii* or *Lophophora lewinii)* appears not to have been known by the Papagos unless it be one of the unidentified roots, rumored vaguely as powerful magic, that come from Mexico. It seems to have little importance for any of the desert area. Hrdlička (15), however, records that the Papagos and Pimas did use peyote slightly.

Tea-like drinks for refreshment were made by steeping the seeds of tansy mustard *(Sophia pinnata)*, a sage *(Salvia columbaria)*, broomweed *(Baccharis sarothroides)*, and joint fir *(Ephedra nevadensis)*.

3. SMOKING

coyote tobacco, *wiupuri (Nicotiana trigonophylla)* leaf dried and smoked

a lichen, *tcewi'ṭ hiosi'k*

Tobacco *(Nicotiana tabacum)* was regularly cultivated but wild tobacco *(Nicotiana trigonophylla)* grew on Elder Brother's mountain. Those who could do so made the expedition to secure it for trade. It was dried, then smoked in a tube made of a section of carrizo *(Phragmites communis)* stem about six inches long, or when carrizo could not be obtained the tobacco was wrapped in the inner white husk of an ear of corn.

The lichen referred to, known as "earth flowers," also grows on Elder Brother's mountain. The informants referred to it as a yellow growth on the north side of rocks which had to be scraped off with a knife. The only specimen procured was not in a condition to make determination possible. This lichen, apart from its magical uses, was dried and mixed with tobacco for smoking; it had a dizzying effect, and an odor that could be noticed from a distance. This may be the *pihol* flowers referred to by Densmore (9).

17:Castetter & Underhill N,E-5 (1931-1934) 1935
NU28 Papago NU28

CUCURBITS

Pumpkin, *hahri (Cucurbita pepo)*
Cushaw, Crookneck pumpkin, *caskatc'ki (Cucurbita moschata)*
Muskmelon, *uuwi hahri (Cucumis melo)*
Watermelon, *kihpi (Citrullus citrullus)*

Both *Cucurbita pepo* and *C. moschata* are commonly regarded as aboriginal species among the Papagos, although this has not been definitely established. The Spanish records refer to the Pima-Papago people as growing *calabasas* (10, 18), a word which was used quite loosely in old Spanish writings to denote pumpkins, squashes, or melons. Mange (18), in 1697, spoke of *melones* (probably muskmelons) and *sandias* (watermelons) as growing on the Gila and it is quite possible that these were grown from seed given by Kino, since this was ten years after his arrival. Other authorities state that watermelons were given the Indians by the Spaniards (27). Pumpkins were planted in the rainy season with an invocation like corn. When harvested the rind was peeled off in a long spiral which was hung from the house roof to dry, after which it was tied into bundles and stored in jars. Muskmelons and watermelons are grown at only a few places, such as San Xavier, where there is plenty of water. No attempt is made to store them.

TOBACCO

Coyote tobacco, *wiupuri (Nicotiana trigonophylla)*
Yaqui tobacco, *wiiw (Nicotiana tabacum)*

The first species used was the native *Nicotiana trigonophylla*, which grows wild on Elder Brother's mountain and is still used to some extent. In addition to this the Papagos and Pimas, at least fifty years ago, were cultivating the common tobacco *(N. tabacum)*. Seeds of this Yaqui tobacco, as the Papagos called it, were probably traded from Mexico. These seeds, in the possession of old men who did the tobacco raising, were considered very valuable and sometimes given as gifts.

17:Castetter & Underhill N,E-5 (1931-1934) 1935
NU28 Papago NU28

349 and dyed buckskin, corn of ocotillo rods painted with dots,
532 and with soapweed leaves *(Yucca glauca)* attached to represent corn leaves. The same range of subjects was used to illustrate the visiting dance.

The effigies used for the wild crops represented sahuaro and prickly pear fruit *(Opuntia* sp.) and might be of red clay or of red ocotillo blossoms. An effigy mesquite bean was made of a twig (19).

293 Prayer sticks were made of catclaw *(Acacia greggii)*
778 upon which was tied eagle down *(Aquila chrysaetos)*, except for a special harvest ceremony at Quitovac in Sonora where it was "given" the people by Elder Brother to use turkey feathers *(Meleagris gallopavo merriami)*. Some prayer
[384] sticks were colored blue with soot from a fire of creosote bush *(Covillea glutinosa)*, the colored stick representing growing corn, the turkey feather the leaves (19).

Dancers at the harvest ceremony carried wands five feet long with bunches of eagle tail feathers at each end and in the middle. Individuals who had had curing dreams
[532] sometimes made fetishes to represent the animals which had taught them. Thus the horned toad *(Phrynosoma coronatum)* was often carved out of wood.

532 An enemy slayer had made for him an effigy of an Apache, using the hairs he had taken from the slain man's temples. The slayer's guardian if skillful contrived a doll of buckskin dressed in Apache costume and wearing the hair.

783 Tobacco smoke *(Nicotiana trigonophylla* and *N. taba-*
276 *cum)* was regarded by the Papagos as a purifying agent. The medicine man, while singing over a patient to "see" the cause of disease, paused regularly to smoke and blew the smoke over the patient as a means of cleansing.

The man who had come into contact with the supernatural by killing an enemy or an eagle, or by joining the salt pilgrimage, had to be purified by a period of segregation and fasting. When this period was ended, older men who had been through the same experience, sang a series of

17;Castetter & Underhill N.E-5 (1931-1934) 1935
NU28 Papago NU28

ritual songs. Then each separately approached the neophyte 783
and blew tobacco smoke over him, auguring success for his 276
future. In the case of a man who had killed an enemy, those who blew the smoke held in their mouths one of two roots, yerba mansa *(Anemopsis californica)* or an unidentified sweet-scented grass, according to the section of the tribe to which the neophyte belonged.

Corn meal was sprinkled on the sea during the cere- 788
monial expedition to secure salt. It was also sprinkled on the ground in front of the singers at the harvest dance. Finally, it was taken in the hand as an offering when a ceremonial favor was requested.

GAMES

The Papagos played the usual games common to the 526
Indians of the Southwest (8). Kickball was played by men with a sphere of mesquite wood *(Prosopis velutina)* about the size of a modern croquet ball. Or the ball might be a pebble embedded in a sphere of mesquite gum. Women played double ball, a form of shinny, with a "ball" made of two hanks of agave fiber cord tied together with two inches of string. Or they might use two deer knuckle bones in the same way. The stick was a peeled wand of ocotillo, slightly curved at one end.

The game known as *kinyiskuhț* was like our parchesi, 524
played outdoors on a square the size of a room, marked out by stones and with smooth round stones as the moving pieces. Each move was decided by a throw of four dice. These were sections of giant cactus rib *(Carnegia gigantea)* about eight inches long with patterns marked with red clay and blue soot of creosote bush *(Covillea glutinosa)*. Women played dice with sticks made from the split halves of ironwood sticks *(Olneya tesota)*. The convex side of each was blackened with soot and the straight side left white. Each woman threw four and the score depended on the number of white and black sides which fell upward.

3: Whited G-5 (1890) 1894 NT15 River Yumans
Papago NU29

The Papagos are not addicted to

intoxicating drink, but smoking and gambling are so common among them that they will even stake their clothing or races, either by men or horses, and on the simple games with which they are familiar.

RELIGION.—The Papagos are nominally Catholics. Adults and children wear crosses and charms. They believe in witches and evil spirits, and buy charms to insure good luck.

At the little village of Ki-ki-wah, where there are a number of returned scholars, it was said that a simple service was held by these "graduates", in which they explained on Sundays the things they had learned about the white man's religion. At the village called Gunsight 2 Mormons have been living among the Indians for nearly 2 years.

EDUCATION.—The Papago youth of both sexes show considerable capacity for mental culture. Many of the Papagos speak Spanish fluently, even after having been at school for 2 or 3 years. When at home on their vacations they only hear Papago and Spanish, which tends to the disuse of what English they have acquired. They are docile, mild in disposition, and well inclined toward their teachers. They learn slowly but surely. The chief difficulty of receiving any permanent benefit from educating them is that they are so disastrously affected by the conditions which meet them when they return to their homes. They virtually return to barbarism and all old influences of a nonprogressive character.

The boys readily learn improved methods of agriculture, also the trades of tinsmith, blacksmith, and carpenter, while the girls learn sewing, cooking, and the general duties of housekeeping.

SCHOOL ATTENDANCE.—During the 3 years of the Tucson Presbyterian mission school 73 Papago children have been enrolled. There are 30 now on the rolls. The number enrolled at the San Xavier reservation schools is about 20. At Sacaton there are 15 Papagos on the roll. The government school there is well conducted.

It will be seen that in the district visited, with the addition of the Papago scholars at San Xavier, not more than 100 in all of these children are in school. The total number of Papago children of school age is probably about 2,000. Their parents will exercise no authority to secure their attendance at school even when they wish them to go, nor, on the other hand, do they hinder them if they desire an education.

PATHOLOGICAL.—The Papagos are very liable to consumption and pneumonia. This arises from the exposure to which they are subject in inclement weather, as all mud roofs leak in protracted rains and a pitch sufficient to carry off the rain would cause the adobe itself to wash off entirely. Many of the tribe are pitted badly with smallpox. Children are subject to measles and whooping cough in addition to lung difficulties. The Papagos have no medical treatment whatever among themselves, and in case of sickness resort to the "medicine man" with his incantations.

The Indians seem to be able to deal with flesh injuries, but are powerless in cases of disease or fractures of bones. In acute local pain they sometimes put a pinch of cotton on the flesh and burn it there, repeating the process on a new spot at a little distance. Ordinarily their only resource is stoical submission.

SAN CARLOS AGENCY.

Report of Special Agent STEPHEN WHITED on the Indians of the White Mountain Apache reservation, Fort Apache subagency, and the Apache, Mohave, and Papago Indians of the San Carlos agency, Arizona, from August to November, 1890.

Names of Indian tribes or parts of tribes occupying reservations: (a) Arevapai, Chilloe, Chirihahwa, Kelotave, Mimbre, Mogallon, Mohavi, Pinal, San Carlos, Santa, Tonto, and Yuma-Apache.

The unallotted area of the White Mountain reservation is 2,232,960 acres, or 3,950 square miles. The outboundaries have been surveyed. It was established, altered, or changed by executive orders November 9, 1871, December 14, 1872, August 5, 1873, July 21, 1874, April 27, 1876, and January 26 and March 31, 1877.

Indian population June 1, 1890: White Mountain Apaches, 3,171; White Mountain reservation, Fort Apache subagency, 1,930; total Apaches, 4,661; Mohave reservation, 551; Yuma reservation, Mohaves, 240; total at agency, 4,682.

The San Carlos agency is situated on a mesa immediately below the junction of the San Carlos with the Gila river. The altitude is about 2,940 feet above sea level. The records of the United States signal service show that the highest temperature for the summer of 1890 reached, July 6, 109°, the lowest for the winter of 1889–1890 was January 20, being 20°. The earliest frost in the fall of 1889 was November 2, and the latest frost in the spring of 1890 was March 16.

The agent reports to the Indian Office that many government buildings at San Carlos are in bad order. They consist of: No. 1, an adobe building 1 story high, 30 by 60 feet, one-half used as agent's dwelling, one-half for storehouse for grain, $1,000; No. 2, a 1-story adobe, built around a court, whole length about 300 feet, used for agent's offices, telegraph office, several rooms for dwelling, storerooms, shops, etc., whole in bad order, needs new roof, $3,000; No. 3, several small adobe buildings in rear of No. 2, used for shops, storerooms, etc., $200; No. 4, an adobe building, 1 story high, 33 by 53 feet, used as a meat shop, $800; No. 5, an adobe building, used for doctor's office and hospital, in bad order, $500; No. 6, a new stone building, 1 story high, 30 by 120 feet, with 4 cross partitions, built for storage, $5,000; No. 7, a stone building, same size as No. 6, now building, for shops; No. 8, a frame steam gristmill, $6,000; No. 9, a frame water gristmill (at Fort Apache), $6,000.

a The statements giving tribes, areas, and laws for agencies are from the Report of the Commissioner of Indian Affairs, 1890, pages 434–445. The population is the result of the census.